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EXAMINER

YAO, SAMCHUAN CUA

ART UNIT PAPER NUMBER

1733

DATE MAILED: 08/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/993,435

Applicant(s)

JANDER, MICHAEL H.

Examiner

Sam Chuan C. Yao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 8-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5,8-10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-7, drawn to a single ply of a sheet molding composite sheet, classified in class 442, subclass 327.
 - II. Claims 8-25, drawn to a method for making a single ply of a sheet molding composite sheet, classified in class 156, subclass 180.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as introducing a resin paste layer directly onto a chopped filamentized layer.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
4. Mr. James Dottavio on around August 14, 2003 left a message thru Examiner's voice mail where a provisional election was made with traverse to prosecute the invention of Group I, claims 1-7. Affirmation of this election must be made by applicant

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in replying to this Office action. Claims 8-25 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Oath/Declaration

5. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the date for which the declaration was executed (i.e. date when the inventor signed the declaration) nor it does provide a title of the present invention. These missing data may be provided on either on an application data sheet or supplemental oath or declaration.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite, because it is unclear what is intended by the phrases "*chopped unfilamentized or partially filamentized fibers*" and "*filamentized fiber layer*". For the purpose of examining these two phrases, these phrases are assumed to require chopped strands/filaments or staple fibers (i.e. short fibers), and filamentary (i.e. long fibers) layer, respectively.

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Claim 2 is confusing, because of the phrase "... *when subsequently compacted*".

If the sheet is NOT subsequently compacted, is the recited impregnation of chopped filamentized layer required or not?

Claim 4 is indefinite, because the phrase "*a resin inhibitor*" is not understood.

What is a resin inhibitor? Does this phrase require inhibiting a resin? What type of resin is being inhibited?

Claims 6-7 are indefinite, because these two claims are indistinguishable from each other.

Claim Rejections - 35 USC § 102/103

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-3 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Grisch (US 4,207,282).

With respect to claims 1 and 3, Grisch discloses a making a molding reinforced polymeric article, the process comprises providing a bottom carrier film layer

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(10), applying a 1st polyester resin layer onto the bottom film layer; depositing chopped fibers (15) onto the 1st resin layer to form a 1st coated sheet; providing a top carrier film layer (16); disposing a fabric layer (30) comprising a "*continuous filament fiberglass mat*" onto the top film layer; applying a 2nd polyester resin layer onto the fabric to form a 2nd coated sheet; laminating the 1st and 2nd coated sheets such that, the chopped fiber layer is contiguous to the 2nd resin layer; compacting the laminated layers to form the molding reinforced polymeric article (col. 3 lines 1-24; column 6 lines 38-46; ; figure 3). Although not explicitly disclosed, the 1st polyester resin layer in a resultant polymeric article must at least inherently have a paste-like (i.e. viscous) characteristic, especially, after the article has been stored for a required maturation period to partially cure the resin. Otherwise, the 1st resin layer in a resultant polymeric article would flow out of the article. In any event, it would have been obvious in the art to use a paste-like polyester resin in making the article of Grisch as such is notoriously well known in the art. Moreover, the fabric layer must inherently be impregnated with a 2nd polyester resin layer during a process of depositing the resin layer as evidence from the following passage: " ... *while allowing the resin to pass therethrough to be deposited at the surface of the composite article formed.*" (col. 3 lines 1-24; figures 3). It is reasonably expected that the resin layer is squeezed or pressed into a fabric by a doctor blade and especially by a plurality of pressing rollers. With respect to claim 2, see column 5 lines 20-23.

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11. Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grisch (US 4,207,282) as applied to 1 or 3 above.

With respect to claim 4, the recited composition in this claim is taken to be conventional in the art.

With respect to claim 5, Grisch teaches using chopped glass filaments. Since E-glass reinforcing fibers is conventional in the art, this claim would have been obvious in the art.

With respect to claims 6-7, it is a common practice in the art to incorporate staple and/or filamentary conductive fibers into a reinforcing fibers in making a molded composite in order to form an electromagnetic wave shielding composite.

12. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Admitted Prior Art (APA) in view of Stoops et al (US 4,141,929) or Grisch (US 4,207,282).

The APA, drawn to an SMC, substantially discloses a structure of an SMC recited in claim 1 (page 7 lines 8-16; figures 1B and 2A). The SMC of the APA differs from the SMC recited in claim 1 in that, the APA does not teach using a *"resin impregnated filamentized fiber layer"*. However, it would have been obvious in the art to provide continuous axially aligned filaments to a resin paste layer taught by the APA, because Stoops et al teaches embedding continuous axially aligned filaments to a resin paste layer in forming a sheet molding composition in order to form composite articles having *"excellent parallel flexural strength from the standpoint of strength in a direction normal or perpendicular to the*

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continuous filaments" (abstract; col. 1 lines 7-33; figure 1) **or alternatively** because, Grisch discloses providing a barrier fabric (30) comprising a *"continuous filament fiberglass mat"* in forming an SMC so that the fabric *"holds the reinforcing fibers internal to the composite while allowing the resin to pass therethrough to be deposited at the surface of the composite article formed."* (col. 2 line 55 to col. 3 line 24; figures 3).

With respect to claims 2-7, these claims would have been obvious in the art for essentially the same reasons set forth above.


Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (703) 308-4788. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael W Ball can be reached on (703) 308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.


Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

Scy
08-15-03